

DISCOVERY OF THE WESTERN CHESTNUT MOUSE *Pseudomys nanus* IN THE TANAMI DESERT

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During the course of regular surveys into the Tanami Desert we have frequently captured small mice which unhesitatingly, have been labelled *Pseudomys desertor* (desert mouse). In September of this year a male specimen twice the size of "normal" *Pseudomys desertor* was captured at Merrina Waterhole (18 46', 131 17') on Winnecke Creek. Its obvious size difference although overall morphological similarities necessitated a more thorough examination than usual. The result was discovery of the tropical grassland 'Top-End' western chestnut mouse, *Pseudomys nanus*, within the Tanami Desert. The similarity in appearance of *P. desertor* and *P. nanus* suggested to us that other specimens previously identified as *P. desertor* were misidentified and were, in fact, *P. nanus*. Further examination of specimens held at the Central Australian Museum in Alice Springs revealed *P. nanus* to occur as far south as Rabbit Flat (20 47', 129 28') in the southern Tanami, a range extension of the species south by several hundred kilometres.

Externally the 2 species of mice are similar in appearance particularly as both have an orange/yellow eye-ring which undoubtedly has been the main reason for confusion in the past. The eye-ring is

however, more conspicuous in *P. desertor* and the numerous guard hairs give this species a much more spiny appearance than is apparent with *P. nanus*. In addition, the belly fur of *P. nanus* and ventral surface of the tail are much lighter in colour. The tail of *P. desertor* appears "rougher" and darker in general.

Osteological characteristics of the skull will undisputedly separate out the 2 species. The palatal foramina of *P. desertor* is shorter in length than the complete length of the upper molar row. As well, rarely does the posterior end of the palatal foramina extend to the first molar tooth. By contrast, the palatal foramina of *P. nanus* is longer than the length of the molar row and frequently extends past the anterior end of the first molar. The structure of the first molar tooth can also be used as a diagnostic characteristic.

While collections of *P. nanus* have so far been limited, it appears that the species is an inhabitant of shrubby woodlands particularly along creeks and drainage lines. *Pseudomys desertor* on the other hand appears to be associated with mature spinifex vegetation and is less likely to occur in shrubby woodland when spinifex is absent.